



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Yasuhide OHASHI

Application No.: 09/028,456

Filed: February 24, 1998

For: SEMICONDUCTOR DEVICE AND ELECTRONIC DEVICE HAVING THE SAME



Group Art Unit: 2811

Examiner: L. Thai

Docket No.: JAO 40656

# 7  
7/8/99  
Gervard

SECOND INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

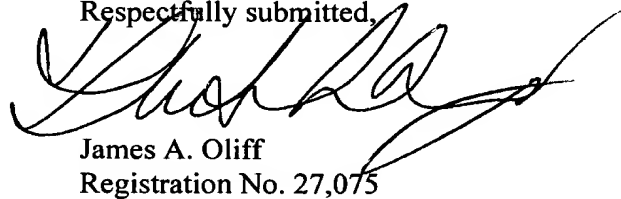
Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☐ 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date or the date of filing a CPA, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- ☒ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.
- ☒ a. I hereby certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).
- ☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).
- ☐ c. Attached is our check no. \_\_\_\_\_ in the amount of \$240.00 in payment of the fee under 37 CFR §1.17(p). Please credit or debit Deposit Account No. 15-0461 as needed to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.

- ☐ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Applicant(s) hereby petition(s) that the Information Disclosure Statement be considered. Attached is our Check No. \_\_\_\_\_ in the amount of \$130.00 in payment of the petition fee under 37 CFR §1.17(i)(1). Please credit or debit Deposit Account No. 15-0461 as needed to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.
- ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).
- ☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).
- ☒ 4. The reference(s) was/were cited in a counterpart foreign application. An English-language version of the foreign search report is attached for the Examiner's information.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Thu Anh Dang  
Registration No. 41,544

JAO:TAD/gam

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p><b>DEPOSIT ACCOUNT USE</b> <b>AUTHORIZATION</b> Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--



## SEARCH REPORT

Application No. 9800440-1

**A. CLASSIFICATION OF SUBJECT MATTER**According to the International Patent Classification (IPC<sup>6</sup>) **H01L 21/60, H05K 1/03****B. FIELDS SEARCHED: IPC<sup>6</sup>****H01L 21/60, H05K 1/03**

Electronic data base consulted during the search (name of data base and, where practicable, search terms used)

**WPIL****C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Database WPIL on Questel, week 9649, London: Derwent Publications Ltd., AN 96-495206, Class H01L, JP 08-255811 A (TOSHIBA AVE KK) and (TOSHIBA KK), abstract. --	1-23
A	Database WPIL on Questel, week 9704, London: Derwent Publications Ltd., AN 97-040249, Class H01L, JP 08-298298 A (MITSUBISHI GAS CHEM CO INC), abstract. ----	1-23

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.**\* Special categories of cited documents:****"A"** document defining the general state of the art which is not considered to be of particular relevance**"E"** earlier document but published on or after the filing date**"L"** document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)**"O"** document referring to an oral disclosure, use, exhibition or other means**"P"** document published prior to the filing date but later than the priority date claimed**"T"** later document published after the filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention**"X"** document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone**"Y"** document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art**"&"** document member of the same patent familyDate of actual completion of the search: **04 May 1999 (04.05.1999)**AUSTRIAN PATENT OFFICE  
Kohlmarkt 8-10, A-1014 VIENNA

Facsimile No. ++431/53424/535

Authorized Officer **HAUK**

Telephone No. ++431/53424/0



Application No. 9800440-1	Applicant SEIKO EPSON CORPORATION
Filing date 26 February 1998 (26.02.1998)	(Earliest) Priority Date 27 February 1997 (27.02.1997)

## SEARCH REPORT

### EXPLANATIONS

Abstract JP 08-255811 A concerns a flip-chip electronic component connection for a mobile communication apparatus which involves a sealing gap between a wiring board and a semiconductor chip by filling the gap with magnetic substance powder containing epoxy resin.

Abstract JP 08-298298 A concerns a semiconductor carrier with an electric insulation layer which has a conductor pattern and a copper laminate connected to the insulation layer consisting of thermosetting resin.



# SEARCH REPORT

Information on patent family members

Application No.

9800440-1

This annex lists the patent family members relating to the patent documents cited in the search report.  
The members are as contained in the EPIDOS INPADOC file.  
The Office is in no way liable for these particulars which are merely given for the purpose of information

Patent document cited in the search report	Publication date	Patent family member(s)	Publication date
---	---------------------	----------------------------	---------------------

JP A2 8255811 01-10-1996

JP A2 8298298 12-11-1996